



Heat Accelerated Cure of 3M™ Scotch-Weld™ Products

Technical Bulletin

November, 2002

These charts are intended as a reference guide for accelerated cure. It is important that the temperature in the bondline reach the specified temperature as increasing the temperature will speed up the cure of the products. If you put the parts into an oven, remember to allow time for the parts to come up to temperature.

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Room temp cured epoxies	75°F (24°C) [RT]	120°F (49°C)	150°F (66°C)	200°F (93°C)
3M™ Scotch-Weld™ DP-100, 3M™ Scotch-Weld™ DP-100 NS, 3M™ Scotch-Weld™ DP-100 FR, 3M™ Scotch-Weld™ DP-100+, 3M™ Scotch-Weld™ DP-105	24 hours	30 min	8-10 min	3 min
3M™ Scotch-Weld™ DP-110 Gray, 3M™ Scotch-Weld™ DP-110 Trans	48 hours	2 hours	45 min	15 min
3M™ Scotch-Weld™ DP-125 Gray, 3M™ Scotch-Weld™ DP-125 Trans	7 days	3 hours	1 hour	20 min
3M™ Scotch-Weld™ DP-190 Gray, 3M™ Scotch-Weld™ 2216 B/A Gray	7 days	6 hours	2 hours	30 min
3M™ Scotch-Weld™ DP-190 Trans, 3M™ Scotch-Weld™ 2216 B/A Trans	14 days	12 hours	4 hours	1 hour
3M™ Scotch-Weld™ DP-270 Black, 3M™ Scotch-Weld™ DP-270 Trans	48 hours	4 hours	1-1.5 hours	30-45 min
3M™ Scotch-Weld™ DP-420, 3M™ Scotch-Weld™ DP-420 Black	24 hours	1 hour	30 min	10 min
3M™ Scotch-Weld™ DP-460, 3M™ Scotch-Weld™ DP-460 NS	24 hours	3 hours	1 hour	20 min
3M™ Scotch-Weld™ 1838 B/A Green, 3M™ Scotch-Weld™ 1838 B/A Tan, 3M™ Scotch-Weld™ 1838 B/A Trans	7 days	6 hours	2 hours	30 min

Heat cured epoxies	175°F (77°C)	200°F (93°C)	225°F (107°C)	250°F (121°C)	300°F (149°C)	350°F (177°C)
3M™ Scotch-Weld™ 2214 Reg, 3M™ Scotch-Weld™ 2214 HD, 3M™ Scotch-Weld™ 2214 HF, 3M™ Scotch-Weld™ 2214 HT (Old), 3M™ Scotch-Weld™ 2214 NMF	7 hours	3 hours	90 min	40 min	10 min	5 min
3M™ Scotch-Weld™ 2214 HT (New)	Don't even try it			60 min	15 min	–

Notes:

- 1) Curing not recommend at any temperatures higher than what is listed on this chart. It may work but there is a much greater potential for problems.
- 2) These are times for full cure; time to handling strength will typically be less.
- 3) Cure times at 40°F (4°C) will be three to four times longer than room temp cure.

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Urethanes	75°F (24°C) [RT]	120°F (49°C)	150°F (66°C)	200°F (93°C)
3M™ Scotch-Weld™ DP-605	48 hours	2 hours	1 hour	30 min
3M™ Scotch-Weld™ DP-640, 3M™ Scotch-Weld™ 3549 B/A	7 days	8 hours	5 hours	2 hours
3M™ Scotch-Weld™ 3532 B/A	24 hours	2 hours	1 hour	30 min
3M™ Scotch-Weld™ 3535 B/A	3 hours	1.5 hours	45 min	–

Acrylics	75°F (24°C) [RT]	120°F (49°C)	150°F (66°C)
3M™ Scotch-Weld™ DP-810, 3M™ Scotch-Weld™ DP-810 Black, 3M™ Scotch-Weld™ DP-810 NS	8-24 hours	30 min	10 min
3M™ Scotch-Weld™ DP-805	24 hours	30 min	10 min
3M™ Scotch-Weld™ DP-820	48 hours	1 hour	20 min
3M™ Scotch-Weld™ DP-8005, 3M™ Scotch-Weld™ DP-8005 Black	24 hours	4 hours	1 hour

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- 1) Curing not recommend at any temperatures higher than what is listed on this chart. It may work but there is a much greater potential for problems.
- 2) These are times for full cure; time to handling strength will typically be less.
- 3) Cure times at 40°F (4°C) will be three to four times longer than room temp cure.

Precautionary Information

Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, call 1-800-364-3577 or (651) 737-6501.

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-362-3550 or visit www.3M.com/adhesives. Address correspondence to: 3M Industrial Adhesives and Tapes Division, 3M Center, Building 220-7E-01, St. Paul, MN 55144-1000. Our fax number is 651-733-9175. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

Important Notice

3M MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of application. Please remember that many factors can affect the use and performance of a 3M product in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a 3M product. Given the variety of factors that can affect the use and performance of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

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ISO 9002

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9002 standards.



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